Claims

What is claimed is:

1. A method for introducing a compensating material into a tire/wheel assembly comprising the steps of:

providing a tire;

providing at least one self-contained batch of compensating material;

transferring said at least one self-contained batch of compensating material into an interior of said tire; and

mounting said tire on a wheel to form a tire/wheel assembly;

wherein compensating material is released from said at least one self-contained batch such that said compensating material is able to freely flow within said tire/wheel assembly.

2. The method of claim 1, wherein said compensating material is a particulate material.

3. The method of claim 2, wherein said particulate material comprises a polymer.

4. The method of claim 2, wherein said particulate material comprises urea formaldehyde resin and cellulose filler.

5. The method of claim 2, wherein said particulate material comprises a metallic material.

6. The method of claim 2, wherein said particulate material comprises an inorganic material.

7. The method of claim 1, wherein said compensating material comprises at least in

part a liquid material.

8. The method of claim 1, wherein said self-contained batch is provided in at least one device to contain said material, wherein said device is destroyed to release said material.

9. The method of claim 8, wherein said at least one device to contain said material is at least one bag.

10. The method of claim 9, wherein said at least one bag is a paper or plastic bag.

11. The method of claim 8, wherein said at least one device is adapted to release said compensating material after positioning thereof inside said tire and upon rotation of said tire/wheel assembly.

12. The method of claim 8, wherein said device is made of a material which will break down upon being rotated within said tire/wheel assembly to release said compensating material.

13. The method of claim 9, wherein said bag has a plurality of perforations therein.

14. The method of claim 9, wherein said bag has a primary seal and a secondary seal, wherein said primary seal is a relatively stronger seal than said secondary seal.

15. The method of claim 14, wherein said primary seal is removed prior to introduction of said bag into a tire.

16. The method of claim 1, wherein said self-contained batch comprises an agglomerate.

17. The method of claim 16, wherein said agglomerate is selected from the group consisting of pellets, briquettes, and extrudates.

18. The method of claim 16, wherein said agglomerate is comprised of particles which are self-adhesively held together.

19. The method of claim 16, wherein said agglomerate is comprised of particles held together with a binder.

20. The method of claim 16, wherein said agglomerate is comprised of particles held together using an exterior coating surrounding said particles.

21. The method of claim 1, wherein said transferring step is selected from the group consisting of manual transfer and machine transfer.

22. A method of compensating for radial and lateral force variations at the tire/road footprint of a tire/wheel assembly comprising the steps of:

providing a predetermined amount of compensating material in at least one self-contained batch in a form preventing said compensating material from freely flowing apart from self-contained batch,

putting said self-contained batch into an interior of said tire,

mounting said tire on a wheel to form a tire/wheel assembly,

mounting said tire/wheel assembly on a vehicle,

wherein said compensating material is released from said self-contained batch and disperses within said tire/wheel assembly to provide compensation of said force variations.

23. A method for introducing a compensating material into a tire/wheel assembly comprising the steps of:

providing a tire;

providing at least one self-contained batch of compensating material, said at least one self-contained batch comprising at least one bag containing a predetermined amount of said compensating material, placing said at least one bag into an interior of said tire;

mounting said tire on a wheel forming a tire/wheel assembly; and

mounting said tire/wheel onto a vehicle;

inflating said tire/wheel assembly whereby said at least one bag becomes ruptured to release said compensating material within said tire/wheel assembly;

wherein said predetermined amount of said compensating material is directly related the size of said tire.